

Notice of Allowability

Application No.

10/687,955

Applicant(s)

MAY, ROBERT ALVIN

Examiner

DARRIN DUNN

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/18/2010.
2. ☒ The allowed claim(s) is/are 47-48 and 50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 12/02/10 | 10/18/10, 8/4/10, 3/23/10, 10/23/08, 4/8/05, 11/09/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/D. D./
Examiner, Art Unit 2121

/ALBERT DECADY/
Supervisory Patent Examiner, Art Unit 2121

DETAILED ACTION

1. The Office Action is responsive to the communication filed on 10/18/2010.
2. Claims 47-48 and 50 are allowed.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 12/02/2010 and 10/18/2010 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowable subject matter:
Dinker et al '490 in view over Folkes et al '982 in view over J. Moy in view over Lin et al. '431 and in further view over Kompella et al. '377, alone or in combination, do not teach the structural and functional limitations depicted in the following claim language.

Claim (47) A first routing component configured for use in a cluster of network enabled devices having at least a first network enabled device with the first routing component and a second network enabled device with a second routing component and a network manager, the network manager external to and communicably coupled to the first routing component and to the second routing component, each of the network enabled devices in the cluster configured to communicate with network devices external to the cluster through a single network address, each of the network enabled devices in the cluster configured to operate in parallel and independently of each other,

the first routing component comprising:

a first memory;

a first configuration manager module;

a first dynamic routing module; and
a first one or more processors,
the second routing component comprising:
a second memory;
a second configuration manager module;
a second dynamic routing module; and
a second one or more processors,
the first one or more processors configured to, by the first a configuration manager module, configured to store
configuration information relayed from a the second configuration manager module of the second
routing component, the configuration information associated with operational characteristics of the
second dynamic routing module; and
a dynamic routing module;
the first one or more processors further configured to, by the first routing component, configured to apply the
configuration information through the interaction of the first configuration manager module and the
second configuration manager module of the second routing component to an instantiation of a the
dynamic routing module operating in the first routing component;
the first one or more processors further configured to, by the first dynamic routing module, configured to
execute in response to a command from the network manager, and further configured to execute
according to the configuration information stored in the first configuration manager module upon an
unplanned failure of the second dynamic routing module of the second routing component;
the first one or more processors routing component further configured to transmit a hitless restart event
responsive to the unplanned failure of the second dynamic routing module of the second routing
component, the hitless restart event signaling network enabled devices external to the cluster to continue
forwarding packets to the cluster; and
the first one or more processors further configured to, by routing component further comprising a
communication module of the first routing component, configured to receive a reply from another routing
component associated with the receipt of a hitless restart.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Schaub on 1/12/11.

47. (Currently Amended) A first routing component configured for use in a cluster of network enabled devices having at least a first network enabled device with the first routing component and a second network enabled device with a second routing component and a network manager, the network manager external to and communicably coupled to the first routing component and to the second routing component, each of the network enabled devices in the cluster configured to communicate with network devices external to the cluster through a single network address, each of the network enabled devices in the cluster configured to operate in parallel and independently of each other, the first routing component comprising:

a first memory;

a first configuration manager module;

a first dynamic routing module; and

a first one or more processors.

the second routing component comprising:

a second memory;

a second configuration manager module;

a second dynamic routing module; and

a second one or more processors,

the first one or more processors configured to, by the first a configuration manager module, ~~configured to store~~ configuration information relayed from a the second configuration manager module ~~of the second~~ routing component, the configuration information associated with operational characteristics of the second dynamic routing module; ~~and~~

a dynamic routing module;

the first one or more processors further configured to, by the first routing component, ~~configured to~~ apply the configuration information through the interaction of the first configuration manager module and the second configuration manager module ~~of the second routing component~~ to an instantiation of a the dynamic routing module operating in the first routing component;

the first one or more processors further configured to, by the first dynamic routing module, ~~configured to~~ execute in response to a command from the network manager, and further configured to execute according to the configuration information stored in the first configuration manager module upon an unplanned failure of the second dynamic routing module ~~of the second routing component;~~

the first one or more processors ~~routing component~~ further configured to transmit a hitless restart event responsive to the unplanned failure of the second dynamic routing module ~~of the second routing component,~~ the hitless restart event signaling network enabled devices external to the cluster to continue forwarding packets to the cluster; and

the first one or more processors further configured to, by ~~routing component further comprising~~ a communication module ~~of the first routing component,~~ ~~configured to~~ receive a reply from another routing component associated with the receipt of a hitless restart.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARRIN DUNN whose telephone number is (571)270-1645. The examiner can normally be reached on EST:M-R(8:00-5:00) 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DD/
01/12/2011

/Albert DeCady/
Supervisory Patent Examiner
Art Unit 2121